

UNDERSTANDING DIGITAL PIRACY THROUGH THE LENS OF PSYCHOSOCIAL, CRIMINOLOGICAL AND CULTURAL FACTORS

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Abstract:

World's leading reports on piracy published by organization such as WIPO, BSA have not explicitly explained the act of digital piracy from a psychosocial, cultural and criminological perspective.

*A total of 624 studies were identified which discussed the digital piracy phenomenon from varied perspective such as economic, political, legal, cultural, psychological, criminological and sociological factors. Relevant papers were further shortlisted from the identified studies by following an inclusion criterion of psychosocial, criminological and cultural factors that impact the behaviour of the perpetrators of digital piracy. Based on these criteria, 74 studies were included in this review which included following factors: **Social Learning theory, Self- Control theory, Neutralizing techniques and justification of perpetrators, Ethical, moral and religious predisposition of digital piracy, Theoretical constructs in explaining digital piracy and Collectivistic and Individualistic Economies.** It also identified potential area of future research based on critical construct of existing literature.*

*Keywords: **Social Learning theory, Self- Control, Neutralizing techniques, Ethical predisposition***

1. Introduction:

Producers of digital products all over the world are actively fighting the spread of pirated copies of their product. It has been generally argued that piracy 'generates unemployment', 'encourages tax evasion', 'infringes intellectual property', 'provokes unfair competition in economy', 'generates inflation' and 'stimulates organized crime' (Karaganis, 2011).

Experts from varied discipline ranging from psychology, sociology, political science, and economics have examined the rationale behind digital piracy (Sundararajan, 2004; Higgins et al., 2006; Gopal et al., 2004; Morris and Higgins 2010; Bagchi et al, 2006). Zhang et al.,2009

propounded that digital piracy feels more acceptable to people than physical theft. Criminologists and legislators study digital piracy differently from street crime or physical crime (Morris and Higgins, 2010). In comparison to physical form of piracy, often, online piracy lack negative social stigma. At times, individuals are not conscious that they are involved in infringing activity by purchasing pirated software, books, movies or music. Public awareness about intellectual property laws at large represents a significant explanation of software piracy rates (Hsu and Shiue, 2008).

There are number of measures adopted by legislatures, economists and governmental organizations to curb digital piracy. The role of psychological, sociological and cultural factors in the context of digital piracy has seldom been discussed in developing nations, although considerable amount of research is done in developed nations.

This paper aims to critically review the research concerning psychological, sociological and cultural factors affecting behaviour towards digital piracy in the last two decades. It will identify potential area of future research based on critical construct of existing literature.

As a part of the paper, a total of 624 studies were identified, which discussed the phenomenon of digital piracy, its prevalence and various factors ranging from economic, political, legal, cultural, psychological, behavioural, criminological and sociological factors leading to downloading and uploading of unauthorized content. Out of 624, 98 studies were further shortlisted by following an inclusion criteria of psychological, sociological and cultural factors that impact the behaviour of the perpetrators of digital piracy.

The chapter concludes on a note that the phenomenon of digital piracy can be understood through the lens of multiple factors other than using the framework of legal and economic factors. While it has been claimed that digital piracy is more prevalent in emerging economies, there is a need for a cross-country research involving emerging and developed economies to study the importance of psychosocial and cultural factors influencing digital piracy.

2. Background:

The Internet and the development in digital technology have brought about dramatic improvements in the quality of life for many individuals in the world, although this confluence has also provided the haven for discrepancy and crime (Adler and Adler, **2006**).

Digital Piracy is an act of illegitimate duplication of digital media, which may include the act of sharing file or illegally downloading using peer to peer file sharing network (Gopal et al, **2004**). With the increase in commercialization of internet, there has been increase in digital piracy in recent years. Access to internet has enabled individuals to easily commit criminal activity for four reasons: it allows anonymous communication, it is transnational, there is a shift in the idea of ownership of physical property to the ownership of ideas, and it is relatively easy (Wall, **2010**). Further on, internet facilitates piracy because the structure of the internet allows the offense to take place away from the copyright holder, leaving the perception that the act is victimless.

While media piracy has become a ‘global menace’, ‘international plaque’ and ‘ubiquitous’, it is further interesting to see the trend in emerging economies (Banerjee et al. **2005**). It has been established that digital piracy is more prevalent in emerging economies than developed economies (Karaganis, **2011**). According to BSA (**2013**) report, emerging economies accounts for 56% majority of all PCs in use globally and it comprises of 73% of all unlicensed software installation. It is estimated that this trend is likely to continue as it is found that 65% of OC software downloaded in emerging economies are properly licensed as compared to 23% in developed economies. Asia Pacific is found to be the region with highest rate of illegitimate PC software installation- China (74%) and India (60%).

3. Digital Piracy: Psychosocial, Criminological and Cultural factors:

Digital Piracy has become a salient topic in legal, economic and political milieu (Hinduja and Ingram, **2009**). World’s leading reports on piracy published by World Intellectual Property Organization (WIPO), BSA, have not explicitly explained the act of digital piracy from a behavioural, psychosocial, cultural and criminological perspective. There is, however, enough indication to suggest that infringement of intellectual property is as significant as robbery and

burglary (Luckenbill and Miller, 1998). It is important to study the psychosocial and cultural factors leading to the act of digital piracy to reduce such act in the cyberspace. In a cross-country analysis of music piracy involving 26 countries by Walls, 2008, it has been suggested that piracy increases with the issue of collectivism and social coordination within society; whereas the rate of income has insignificant impact on the level of piracy in any nation. It has been found by Sheehan, Tsao and Yang (2010) that economic, social and collective utilities motivate the gratification of digital music piracy among college students; with social utility being the most important factor. These studies reinforce the need to study the phenomenon of digital piracy from psychological, cultural and sociological perspective.

3.1. Social Learning Theory & Digital Piracy:

While postulating the social learning theory Akers, 2011 suggested that criminal behaviour is learned through association with people. He also proposed the sequence of such learning and its manifestation. Once a social environment is created consisting of associations of people inclined to criminality, patterns of *imitation* are likely to be followed. With further reinforcing stimuli, the deviant behaviour may be perpetuated. Akers, 1992; Akers and Lee, 1996 further stated that the relationship between individual and social processes is influenced by person's models of behaviour, conducive or aversive environment to crime commission, and *differential reinforcement*.

Gottfredson, 1987 cited the connection between deviant peer association and deviant behaviour and stated, '*that people acquire the propensity to delinquency, find delinquent friends, and then commit delinquent acts, including serious criminal acts*'. There are numerous scholarly and research articles, which presented social learning theory as an appropriate framework to understand deviant online behaviour (Higgins and Wilson, 2006; Higgins et al, 2007; Hinduja and Ingram, 2009; Higgins and Makin, 2004; Skinner and Fream, 1997). In a survey involving 2000 university students by Hinduja and Ingram, 2009, it has been suggested that both online media sources (chat rooms) and peer influences are significant to predict music piracy. This study further expressed that the behaviour of piracy can be explained by offline (friends, acquaintances, group discussion) and online communication (email, chat rooms, instant messaging programme). In fact, participants who associate with those who display a tolerance

towards deviance and illegal downloading had higher piracy scores. In the context of music piracy, it has been suggested that pervasive online theft of intellectual property can be curbed by encouraging ethics pertaining to the practice of information technology and acceptable rules of engagement (Higgins and Wilson, **2006**). This study, however, was limited to student population, thereby restricting the generalizability of findings to other population. The findings were based on self-reported assessment of participants with the possibility of under-reported cases of music piracy.

Individuals living in a conducive environment towards piracy are more likely to indulge in the act of digital piracy (Higgins and Wilson, **2006**; Higgins and Makin, **2004**; Higgins et al, **2007**; George, **2009**). Hence, Higgins and Wilson, **2006** recognized social environment to influence the attitude and behaviour of individuals. An empirical study conducted by Higgins, Marcum, Freiburger and Ricketts, **2012** involving 287 students in the United States suggested that peer association has significant connection with digital piracy.

To address the issue of digital piracy, there is a need to modify social attitude, belief and behaviour towards intellectual property protection and marketing strategy of software developers. Effective law enforcement alone will not address the issue (Lau, **2003**). It was further revealed that although people are aware that piracy is illegal, they are prepared to do it if the behaviour is socially acceptable. People change their perception, attitude and consequently behaviour as per existing value system of society in general (Baron, **1984**). If the perception is inconsistent with societal's norms and values, there is a greater tendency for people to change their own value system (Givon, **1995**).

There had been studies looking into behaviour that supports the willingness to pay for a non-pirated software and the factors that affect such behaviour. One of such studies led by Hsu & Shiue, **2008** administered a consumer survey to a sample group of 799 students from various schools and colleges in Taiwan. It was observed from the study that while the social norms positively influenced the willingness to pay, however the prosecution risk did not have much of an effect on the intention to own pirated software. The study did not look into the cross-culture variation and its effect on the willingness to pay for original software.

The less significance of legal sanctions was again highlighted in a separate research wherein 34 persistent pirates were interviewed by Holt and Copes, **2010** to study justifications, practices, risk and rewards associated with digital piracy. The findings suggested that pirates share a belief which structure their identity and develops relationship with other pirates. The belief further reinforces the perpetrators to commit piracy.

Social and cultural norms also influence digital piracy rate in a society. Piracy has been observed as a group activity as it involves distribution of computer software, songs, videos and movies amongst friends, co- workers, and relatives (Gopal and Sanders, **1998**). Essentially, individualism and collectivism are two accepted cultural dimensions of a society (Hofstede et al., **2010**). Husted demonstrated that cultural variables such as power distance, individualism, masculinity and uncertain avoidance (the extent to which members of a culture feel threatened by uncertain and unknown situations) determine the rate of software piracy in a region (Husted, **2000**).

In collectivistic societies, group influence exert a pressure on individuals to share their resources. As a result, individualistic societies tend to involve lesser in digital piracy (Husted, **2000**; Marron and Steel, **2000**; Shinet al., **2004**). Notwithstanding this trend, emerging individualistic countries like South Africa and Mexico have overwhelming piracy rates.

The effect of collectivistic society and individualistic society was again observed by Chiou et al., **2011** in a study involving 219 college students of Taiwan and 252 students of the United States. The research observed the effects of perceived risk of getting caught other than looking into cultural dimension of attitude and intention towards music piracy. Perceived risk of getting caught can significantly reduce the act of music piracy in both countries. The study further advocated that stringent legal sanctions can curb piracy significantly in Taiwan than the country in comparison. The United States falls under the category of an Individualistic Society and Taiwan has been considered as a collectivistic society (Triandis, **1994**). It was found that collectivistic culture act as a motivator for downloading illegal music files. Further, there were suggestions made to include more countries to understand the impact of different cultures (collectivistic and individualistic) and environmental factors on digital piracy. It has been already

indicated by Walls, **2008** in the cross- country analysis of 26 diverse nations that piracy increases with increase in the level of collectivism and social coordination.

3.2. Self-control and the act of digital piracy:

Linking self-control as a predictor in explaining criminal behaviour has been established by Gottfredson and Hirschi, **1990**; Gottfredson, **1987**. The act of digital piracy does amount to deviant or criminal behaviour (Zhang et al, **2009**; Wall, **2010**). Researchers have demonstrated relationship between self-control and digital piracy (Higgins, **2004**; Higgins and Wilson, **2006**; Higgins and Makin **2004**; Higgins et al, **2008**). Krueger et al.,**1996** established that individuals with low self-control are more likely to project instant gratification and, as a result are less likely to wait for the original version of digital media. They will be more attracted towards thrill, ease and immediate acquisition of the digital software or music file and will be less sensitive towards copyright agreement associated with a digital media. Using multiple parameters like personality measure (Grasmick et al., **1993**) social bonding (Hirschi and Gottfredson, **1994**) and inhibition measure (Piquero, **2007**; Higgin et al., **2008**), it has been suggested that individuals with low self-control are more likely to be involved in digital piracy. Individuals with high regards for family members, parents and school (high social bonding) are less likely to get involved. Further, individuals with greater self- generated inhibitions are less likely to become the perpetrators, while individuals with low self-control are more likely to involve in deviant online behaviour (Higgins et al., **2007**).

A self-reported questionnaire filled by 337 respondents in the United States studied socio- demographic variables alongside previous pirating behaviour, low self-control and ethical predisposition in explaining deviant peer association. With age, individuals are less likely to associate with deviant peers. This study further elucidated that low self-control not only predicts high pirating behaviour, but it is a factor that leads to association with deviant piracy peers (Wolfe and Higgins, **2009**).

It has been contended by previous researchers that there exist a theoretical (Akers and Cochran, **1985**; Akers, **2011**; Evans et al., **1997**; Gottfredson and Hirschi, **1987**; **1990**) and empirical (Gibson and Wright, **2001**; Higgins and Makin, **2004**; Longshore et al., **2004**; Wright

et al., 1998) link between self-control and social learning theory. Further a study involving 332 university undergraduates developed a 3 factor model showing the relationship between self-control, social learning theory and digital piracy. This study suggested that social learning has a mediating effect on low self-control and digital piracy. Individuals with low self-control and association with deviant peer are more likely to be involved in digital piracy. Further suggestions have been made to study theoretical constructs of self-control with other variables or theories, which may have substantial significance on understanding digital piracy (Higgins et al., 2007).

3.3. Neutralizing Techniques and Justifications of Perpetrators:

Zhang et al., 2009 unveiled that digital piracy feels more acceptable to people than physical theft. Psychologists at the University of Notre Dame, Crowell et al., 2005 furthered that economic factors may provide pirates with a means to justify his or her actions, but they are not the real motivators. Computer appears to act like an ethical filter. It creates a “psychological distance between creator and pirate.” Easy accessibility, autonomous and anonymous identity and asynchronous nature of communication have contributed to highly psychoactive experiences in the online world. Moreover, chances of detection, apprehension and prosecution over internet are exponentially smaller (Hinduja and Ingram, 2009).

A study of 2,032 undergraduates from Midwestern University by Ingram and Hinduja, 2008 revealed the extent of neutralization techniques in anticipating the participant’s involvement in music piracy. There are 5 types of justification: *denial of responsibility* (“it is not my fault”), *denial of injury* (“no harm will result from my actions”), *denial of victim* (“nobody got hurt”), *condemnation of the condemners* (“how dare they judge me, considering how corrupt and hypocritical they themselves are”), and *appeal to higher loyalties* (“there is a greater and higher cause”) (Sykes and Matza, 1957; Skyes and Matza, 2003).

Digital Piracy is considered as a white collar crime (Gopal et al., 2004) and researchers postulate that neutralization technique is more prevalent among organizational and white collar crime (Maruna and Copes, 2005). Individuals are more likely to justify or excuse their behaviour when they are partially committed to the deviant activity (Maruna and Copes, 2005). Ingram and Hinduja, 2008 further analyzed that neutralization is a significant framework in understanding

music and movie piracy. In fact, 90 % of the college participants in a study believed that downloading of illegal music files is an appropriate behaviour owing to a myriad of neutralization and justifications to the deviant behaviour (Ingram and Hinduja, 2008). In a study involving 34 persistent pirates by Halt and Copes, 2010 found denial of responsibility as a common neutralizing technique acting towards a justification to their deviant behaviour. Further in a different study, computer science students admitted their involvement in software piracy and it was found that in spite of acknowledging the immoral character of their actions, they were indifferent to the cost borne by software developers (Konstantakis et al., 2010). Using a semi-structured interview technique the research found that high cost of genuine software, conducive academic environment for piracy and their student status as a major excuse, rationale or justification behind their involvement in the acts of digital piracy.

3.4. Ethical, Moral and Religious Disposition & Digital Piracy:

The moral judgment of individuals towards digital piracy can be understood by Kohlberg's level of moral development. Kohlberg developed 3 stages of Moral Development with 2 sub-stages in each stage.

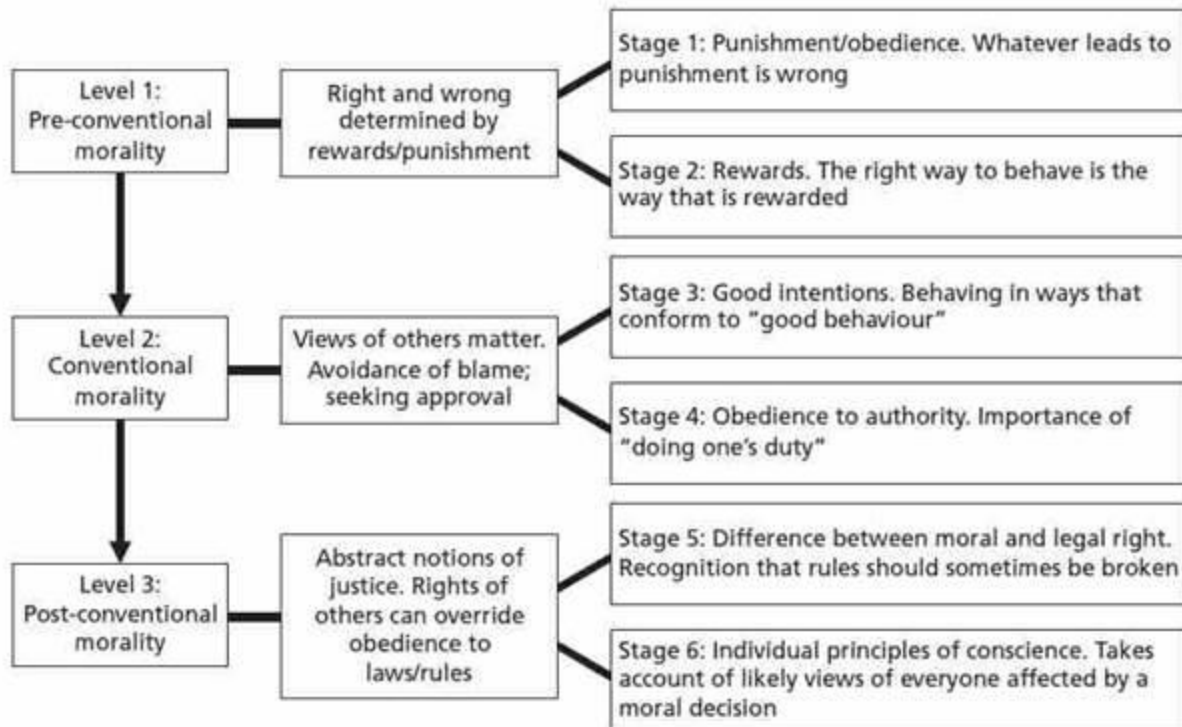


Figure 1: ¹

The idea behind this theory is that as individuals grow intellectually, they also grow morally (Gould, 2011). In a study involving business school students, it was suggested that shoplifting was considered to remain in the 1st stage of the second level of Kohlberg's table where peer pressure defined influence. Connecting the act of copying of software to shoplifting, the report concluded that the moral consequence of copying software is less significant for users than the act of shoplifting (Egan and Taylor.,2010). Majority of research and scholarly articles have shown that students are most likely to indulge in the act of digital piracy and hence, most of the research on digital piracy has concentrated on students as their target sample of study. A cross-country comparative research administered by Kini et al (2003) involving 843 students in the United States and 663 students from Thailand showed the difference in the perceived moral intensity towards software piracy. It has been found that students in the United States have higher mean scores of moral intensity than students from Thailand. However, the factors which define higher moral intensity in the United States have not been stated and defined in the study.

¹ Kohlberg, L, 'Stages of moral development' (1971) *Moral education* 23-92.

It has been established that individuals with lower ethical predispositions are more likely to get involved in digital piracy (Hinduja and Ingram, **2004**; Hinduja and Makin, **2004**; Higgins and Wilson, **2006**). Students do not take into consideration moral values and predisposition, while downloading unauthorized software from internet (Siegfried **2001**). The act reflects that individual interest outweighs the presence of moral issue (Konstantakis et al. **2010**). Further, moral predisposition of a student towards the act of digital piracy is also dependent on how others, including fellow students, professors and administrative staff contemplate the issue.² Researchers have confirmed that students consider piracy as a low moral issue and give economic reasons as justification behind their involvement in the act (Lau, **2003**; Al- Rafee & Cronan, **2006**; Cronan and Al Rafee, **2008**).

In the course of developing a Behavioural Model of Digital Piracy a questionnaire was administered to 133 students who were at an undergraduate level of business studies (Gopal et al., **2004**). This study was based on a deontological theory of ethical behaviour, which states that a person's intentions are based on his ability to evaluate goodness of his actions, which is further influenced by the principle of utility. This utility principle states that many perceive an action to be right if it causes the greatest good for the most number of people possible. The results of the study indicated that age of the actor, value of the product, popularity and lack of awareness are some of the factors that influenced music piracy.

While most of the studies concentrated on understanding digital piracy in developed countries, one out of the very few studies concentrated on Arab and Middle Eastern Country to reflect upon the effect of religion, law and awareness on digital piracy. Al Rafee and Rouibah, **2003** analyzed that out of a total sample size of 319 students, it was observed that religious and aware group showed a significantly less intention to engage in piracy. However, such intention varied with age groups and different sections of the society. Additionally, the study was conducted in a conservative Islamic Country, which may have been the reason for religious factors having a major impact on the overall results. This situation could be different in countries practicing other religions or in less conservative societies. The study did not take into

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consideration all these factors. Therefore, the findings of this study cannot be generalized to everyone around the globe.

A study conducted in 2014 (Kos Koklic et al., **2014**) looked into the role of perceived risk and moral risk on the attitude and behavioural intentions of adult computer users. It established a significant impact of perceived moral intensity and perceived consequence of digital piracy on society and consumer's overall attitude towards digital piracy.

3.5. Theoretical constructs in explaining Digital Piracy:

Researchers and academicians all over the world have tried to investigate digital piracy phenomenon through various behavioural theoretical constructs like Theory of Reasoned Action (TRA) (Fishbein and Aizen, **1975**) and The Theory of Planned Behaviour (TPB) (Aizen, **1991**).

Since late 1980s and early 1990s, a number of efforts have been made to study digital piracy. The TRA constructed by Fishbein and Ajzen, **1975** is regarded as most fundamental and significant theory to explain human behaviour. Christian & Eining, **1991** employed TRA model and studied the factors influencing software piracy. A study of 139 undergraduate accounting students indicated that attitude, material consequences and normative expectations are significant factors that explain behaviour relating to piracy. Loch & Conger, **1996** conducted an exploratory study and used TRA to describe ethical decision in making the use of computer. The study revealed that self- image, deindividuation and computer literacy had a significant impact on attitude and intention to computer privacy and ownership. They, however, concluded on a note that TRA does not adequately encapsulate ethical decision making process.

To test the theory of planned behaviour, expected utility theory and deterrence theory, a study involving 201 respondents was conducted to understand software piracy (Peace et al., **2003**). The research further drew attention to the fact that punishment severity; cost of software and punishment certainty had a connection with software piracy. To further study the aforementioned theories and to validate generalizability of the model in cross- cultural scenarios and different segments of society, a study was conducted by Yoon, **2011** on 270 undergraduate students in China proposed for an integrated model- TPB and ethics theory to study digital

piracy. It has been established that moral obligation and justice component of Ethics Theory and TBP variables like subjective norms, attitude and behavioural control, influence the intention to commit piracy.

A pilot study involving 20 students from 2 universities in Europe investigated the intention to share media files over peer to peer networks (Blake and Kyper, **2013**). They contended that the theory of planned behaviour can explain significant differences in the intention to share media files (both legitimate and pirated files) over P2P network. It has been recommended that a comparative study of China and Europe must be conducted to investigate cross-cultural variation in measuring file-sharing and predicting actual usage.

Taylor et al., **2009** observed the social psychological foundations underlying the behaviours related to digital piracy. Adopting Perugini and Bagozzi's model of Goal Directed Behaviour, the influence of motivation, frequency of piracy and perceived control on the intention to indulge in movie and music piracy was assessed by Blake and Kyper, **2013**. Participants were divided in to 2 groups including those who were intended to engage in music or movie piracy and those who would like to refrain from indulging in music or movie piracy. The model anticipated 20% to 68% variance in intention of the participants depending on their representation in their respective groups.

The application of Social Cognitive Theory (SCT) was also extended to downloading behaviour of pirates (LaRose and Kim, **2006**). College students from Midwestern University were studied in this research. SCT was considered most appropriate to study deviant behaviour like downloading as it includes (coping) self-efficacy and (coping) self- regulation. Coping self-efficacy relates to an individual's perceived ability to handle negative events; whereas self-regulation includes self- control. The behaviour of habitual file sharing and downloading hundreds and thousands of songs without listening to those songs is a projection of poor self-regulation. The outcome of file sharing was predicted through SCT and was not perceived in the framework of Theory of Planned Behaviour.

4. Critical Constructs of the Review:

Broadly speaking, there are certain shortcomings of the existing research explaining the act of digital piracy. This can be summarized into three areas covering the following issues.

4.1. Sample demographic of majority research include only students:

Majority of research projects, which studied digital piracy have based their exploration on the sample target of either undergraduate or graduate students from one to two universities (Chiou et al., 2011; Christensen and Eining, 1991; Cronan and Al-Rafee, 2008; s'Astous et al., 2005; Wolfe and Higgins, 2009; Gopal et al., 2004; Higgins and Makin, 2004; Higgins et al., 2006; Higgins et al., 2007; Wolfe and Higgins, 2009; Hsu and Shiue, 2008; Husted, 2000; Hinduja and Ingram, 2009; Kini et al., 2003; Lau, 2003; Konstantakis et al., 2010; Siegfried, 2001; Zhang et al., 2009). The studies have demonstrated that students are mostly involved in the act of piracy. Limiting the sample to students, however, restricts the generalizability of findings to other population. To fill the gap, Kos Kokilic et al., 2014, analysed 943 adult computer users and students to study the perceived adverse effects of digital piracy. The study could not draw significant comparative analyses of the perception and attitude of students and adults to digital piracy due to limited sample size. There is a need for future research to study different universities and regional demographics.

4.2. Self- Report Assessment: It has been observed that to analyse the factors associated with digital piracy, authors have administered self- reported assessment method on the respondents (Hinduja, 2006; Wolfe and Higgins, 2009; Lalovic et al., 2012). This method as a tool of assessment is considered both inexpensive as well as efficient by researchers (Robins et al., 2009). They can be easily administered in mass testing sessions and myriad variables can be collected from the respondents in single settings as opposed to one- to- one interview and diary studies. However, responses from self- report method may have been subjected to recall bias, social desirability bias or errors in self- observation. In other words, participants might have underestimated their involvement in the act of digital piracy in order to adhere to social desirability norm (Hinduja and Ingram, 2009).

4.3. Intention and not the actual use: In an effort to measure attitude of digital piracy, most of the studies (e.g. Kwong et al., 2003; Mortan and Koufteros, 2008) focussed on measuring intention of the participants and not their actual involvement in the act. Although, intention is a significant factor that determines the actual involvement of individuals in the act, but there might be external or situational factors as well that might influence the decision- making of a user. Intention is not representative of actual engagement in digital piracy. It is imperative to evaluate actual behaviour to develop an adequate model to address the issue.

5. Conclusion:

The findings of 68 research studies presented in this paper suggest that predisposition towards digital piracy is influenced by personality factors (self-control), personal or psychological factors (neutralization techniques, attitude and beliefs), social and cultural factors (social learning, collectivistic/ individualistic factors). Extensive literature is available on factors other than legal and economic factors, nevertheless, it has been found that these factors are rarely acknowledged by the stakeholders (legislatures, industry, and policy makers) for curbing digital piracy (Bagchi et al., 2006). It is proposed that digital piracy is more prevalent in emerging economies (Karaganis, 2011). This calls for a cross-country research involving emerging and developed economies to study the importance of psychosocial and cultural factors influencing digital piracy, thereby proposing recommendations for the legislatures, industry and policy makers to understand the issue through the lens beyond economic and legal factors.

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